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~~113. (New) A method for providing network management to a customer employing a browser in communication with a communications service enterprise over an internet, said method comprising:~~

~~managing a client session over the internet with a secure web server in response to customer entry and supporting communication of request messages received from the browser to a network management resource;~~

~~initiating a download of a client application integrated for use within the browser in accordance with a predetermined customer entitlement, said client application programmed to be in interactive communications with the network management resource.~~

REMARKS

By this amendment, claims 1-43, 45-97, and 99-113 are pending, in which claims 110-113 are newly presented, and claims 1, 45, 58, and 99 are amended. Care was exercised to avoid the introduction of new matter.

The Office Action mailed October 10, 2001 objected to the Abstract and rejected as obvious under 35 U.S.C. § 103 claims 1-3 and 58-60 based on *Cianfrocca et al.* (US 6,088,796) in view of *Hogan et al.* (US 5,699,528), claims 4 and 61 over *Cianfrocca et al.* and *Hogan* in view of *Carroll* (US 6,105,131), claims 5 and 62 over *Cianfrocca et al.* and *Hogan* in view of *Riggins* (US 6,131,116), claims 8-9 over *Cianfrocca et al.* and *Hogan* in view of *Chung et al.* (US 6,012,090), claims 10-17, 19, 66-73, and 75 over *Cianfrocca et al.* and *Hogan* in view of Official Notice. Claims 20-43, 45-57, 76-97, and 99-109 have been objected to as allowable but dependent on a rejected base claim.

In response to the objection, the Abstract has been amended.

Claims 1, 45, 58, and 99 has been amended, and new claims 110-11 have been presented to reverse the substantive portion of the amendment made last December 6, 2000. Accordingly, no new matter introduced.

The rejection of claims 1-19 and 58-75 is respectfully traversed because the references fail to teach or suggest the limitations of the claims. For example, independent claim 1 recites:

one or more client applications integrated within a web-based GUI and downloaded from the one or more secure web servers according to pre-determined customer entitlements

and independent claim 58 recites:

initiating a download of a web-based GUI from said secure web server, said downloaded web-based GUI of launching one or more of a plurality of client applications available to a customer according to pre-determined customer entitlements

This feature is not shown in the applied references. For example, *Cianfrocca et al.* is directed to a secure access query system that includes a messenger system 103 which receives queries from a user over the Internet 101 and relays the queries to a firewall 104. *Cianfrocca et al.* is primarily concerned with the implementation and functionality of the messenger system 103 and does not get into any detail on the client applications more relevant than they are “custom-written” (col. 17:14). In particular, *Cianfrocca et al.* fails to disclose whether the client applications are downloaded from a secure web server, much less whether that downloading is done “according to pre-determined customer entitlements.”

The portion of *Cianfrocca et al.* cited in the Office Action for this feature does not support the rejection. Specifically, col. 14:20-24 is directed to the use of browsers as clients for distributed applications (col. 14:20-23) and discloses that distributed applications includes individual application programs that are “linked together by means of a single messenger system” (col. 14:24-27). This portion, however, includes no discussion of the details or even the existence of downloading.

The other primary reference, *Hogan*, was not relied upon in the Office Action for this feature, and properly so. *Hogan* is directed to a web site for allowing user to receive and pay bills on the Internet, in one embodiment of which, “the gateway computer retrieves a copy of the electronic bill payment program from PC 100 and runs the program” (col. 9:32-34). *Hogan*, however, fails to disclose any downloading of the client applications from a secure web server, much less whether that downloading is done “according to pre-determined customer entitlements.”

The secondary references, *Carroll*, *Riggins*, and *Chung et al.*, which were applied only for various details unrelated to downloading, also do not teach or suggest this feature.

Claims 10-17, 19, 66-73, and 75 have been rejected by taking Official Notice of certain features. Pursuant to the MPEP § 2144.03, Applicants respectfully traverse the Official Notice and request the Examiner to produce references showing the claim features or withdraw the rejection as factually inadequate.

Newly presented claims 112-113 are allowable over the applied art. For example, claim 112 recites “a client application integrated for use within the browser and downloadable from the web server in accordance with a predetermined customer entitlement” and claim 113 recites “initiating a download of a client application integrated for use within the browser in accordance with a predetermined customer entitlement.” These limitations are not taught in the references, which do not even disclose downloading client applications.

Therefore, the present application, as amended, overcomes the objections and rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at 703-425-8516 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

DITTHAVONG & CARLSON, P.C.

1/10/02
Date



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APPENDIX

1. (Twice Amended) An integrated system for providing a plurality of communications network management services and products to a customer over the public internet, said network management services and products accessible from a client workstation employing a client browser associated with said customer and receiving web based communications from a communications service enterprise, said system comprising:

- (a) one or more secure web servers for managing one or more secure client sessions over the internet in response to customer entry into said system, each said one or more secure web servers supporting secure communications with said client workstation;
- (b) one or more client applications integrated within a web-based GUI and downloaded from the one or more secure web servers according to pre-determined customer entitlements, each of said one or more client applications for providing a customer interface integrated within said web-based GUI and enabling interactive communications with one or more communications network management resources provided by said communications service enterprise via the one or more secure web servers; and,
- (c) each of said one or more secure web servers supporting communication of request messages entered by said customer via said customer interface to said one or more network management resources providing a desired communications network management function;

wherein one or more remote application resource processes said request messages and provides responses to said one or more secure web servers for secure uploading to said client browser and display via said integrated customer interface[, said one or more network management resources including a system for generating invoice documents

relating to communications management services provided by a communications service enterprise, comprising:

a client application downloaded from the one or more secure web servers for enabling selection and presentation of invoice documents in accordance with customer entitlements, said client application further generating an invoice request message in response to customer selection of a specific invoice option and forwarding the invoice request message via the secure web server; and
an invoice application server for maintaining a database of image files associated with invoice documents from the application service and receiving the invoice request messages, said invoice application assigning the database in response to a request message, generating a response message include a customer selected invoice document, and downloading said response message to said client workstation, whereby said customer selected invoice document is formatted in a manner suitable for display via said integrated client interface].

45. (Twice Amended) The integrated system as claimed in Claim [1] 110, wherein the database of image files further includes an object database, said invoice application server further comprising:

a means for imaging documents by defining key information necessary to retrieve documents from the communications application service and compress the documents for storing; and
a means for loading the compressed documents into the object database.

58. (Twice Amended) A method for enabling customer management of communications network assets via the public internet, including provision of a plurality of services and products accessible from a client workstation employing a client browser associated with a customer and capable of receiving web based communications from said communications service enterprise, said method comprising:

- (a) enabling interactive communications between said system and said customer over the public Internet with an object oriented protocol invoked from within said client web browser, said protocol supporting customer identification, authentication and a determination of network entitlements for the customer;
- (b) managing a plurality of customer sessions over the public Internet with a secure web server, said secure web server providing session encryption and management of the customer's session, said session management including the steps of identifying, validating, and determining the customer's entitlements within the network;
- (c) initiating a download of a web-based GUI from said secure web server, said downloaded web-based GUI of launching one or more of a plurality of client applications available to a customer according to pre-determined customer entitlements,
- (d) providing a customer interface integrated within said web-based GUI upon which to launch a selected client application, said customer interface enabling interactive communication of request messages with one or more of a plurality of communications network management resources capable of providing a selected communications network management function;
- (e) a communications network management resource receiving said request messages, generating a proxy request, and communicating said responses to said secure web server

for secure uploading to said customer workstation for display via said integrated interface[,

wherein said one or more network management resources include a system for generating invoice documents relating to communications network manage services provided by said communications service enterprise, said method further comprising:

downloading a client application from the secure web server for enabling selection and presentation of invoice documents in accordance with customer entitlements; generating customer request messages including customer selection of a specific invoice option;

providing an invoice application server for maintaining a database of image files associated with invoice documents from the application service, said invoice application sever receiving the invoice request message from said customer; accessing the database in response to a request message; generating a response message including a customer selected invoice document; downloading said response message to said client workstation; and,

formatting said customer selected invoice document in a manner suitable for display via said integrated client interface].

99. (Twice Amended) The method as claimed in Claim [58] 111 wherein the database of image files further includes an object database, said invoice application server further: converting invoice documents to images; defining key information necessary to retrieve documents from the communications network management resource application service and compressing the documents for storing; and loading the compressed documents in the index database.

110. (New) The integrated system as claimed in Claim 28, wherein said one or more network management resources includes a system for generating invoice documents relating to communications management services provided by a communications service enterprise, said integrated system further comprising:

a client application downloaded from the one or more secure web servers for enabling selection and presentation of invoice documents in accordance with customer entitlements, said client application further generating an invoice request message in response to customer selection of a specific invoice option and forwarding the invoice request message via the secure web server; and

an invoice application server for maintaining a database of image files associated with invoice documents from the application service and receiving the invoice request messages, said invoice application assigning the database in response to a request message, generating a response message include a customer selected invoice document, and downloading said response message to said client workstation, whereby said customer selected invoice document is formatted in a manner suitable for display via said integrated client interface.

111. (New) The method as claimed in Claim 72, wherein said one or more network management resources include a system for generating invoice documents relating to communications network manage services provided by said communications service enterprise, said method further comprising:

downloading a client application from the secure web server for enabling selection and presentation of invoice documents in accordance with customer entitlements;

generating customer request messages including customer selection of a specific invoice option;
providing an invoice application server for maintaining a database of image files associated with invoice documents from the application service, said invoice application sever receiving the invoice request message from said customer;
accessing the database in response to a request message;
generating a response message including a customer selected invoice document;
downloading said response message to said client workstation; and,
formatting said customer selected invoice document in a manner suitable for display via said integrated client interface.

112. (New) An integrated system for providing network management to a customer employing a browser in communication with a communications service enterprise over an internet, comprising:

a web server for managing a client session over the internet in response to customer entry into said integrated system, said web server in communication with said client browser for supporting communication of request messages received from the browser to a network management resource; and

a client application integrated for use within the browser and downloadable from the web server in accordance with a predetermined customer entitlement, said client application programmed to be in interactive communications with the network management resource.

113. (New) A method for providing network management to a customer employing a browser in communication with a communications service enterprise over an internet, said method comprising:

managing a client session over the internet with a secure web server in response to customer entry and supporting communication of request messages received from the browser to a network management resource;

initiating a download of a client application integrated for use within the browser in accordance with a predetermined customer entitlement, said client application programmed to be in interactive communications with the network management resource.